

I CLAIM:

1. A process for accurate and consistent control of temperature and ventilation within precise performance parameters for heating, ventilation, and/or cooling systems comprising:

- a) Operation of HVAC equipment essentially independent of temperature differentials;
- b) Operation of HVAC equipment for minimum periods of time regardless of other operating conditions;
- c) Control of equipment to assure idle periods for minimum times;
- d) More efficient and comfortable ventilation options when heating or cooling apparatus is not in operation;
- e) Means changing the effective temperature setting on demand on a temporary basis, and returning to the original setting automatically, with provision for canceling such operation prematurely;
- f) Means encoding HVAC equipment operating parameters to produce a digital signal to communicate such parameters to said equipment or a controller operating said equipment.

2. The process of claim 1 wherein the warmer process logic is described by the flow diagram of Figure 2.

3. The process of claim 1 wherein the warmer process is described by the source code statements of Figure 4.

4. The process of claim 1 wherein the encoding process results in a signal similar to Figure 3.
5. The process of claim 1 wherein the encoding process is described by the source code statements of Figure 5.
6. The process of claim 1 wherein the decoding process is described by the source code statements of Figures 6-8.
7. The process of claim 1 wherein the elements are implemented by the object code statements of Figure 9 and Figure 10.
8. A process for encoding and decoding digital data for communication in a serial sequence comprising:
 - a) A synchronizing pulse distinguished from data pulses by a unique width;
 - b) data pulses which are distinguished by their relation to a preceding pulse;
 - c) data pulses in which the state of the data is determined by the width of the individual pulse.
9. The process of claim 8 in which encoding is accomplished by the statements in Figure 5.
10. The process of claim 8 in which decoding is accomplished by the statements in Figure 6.